K040862

## Summary of Safety and Effectiveness

#### Non-Confidential Summary of Safety and Effectiveness

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Official Contact:

John O'Dea, Ph.D. - General Manager

Proprietary or Trade Name:

Guardian Neonatal CPAP / Humidification Systems

Common/Usual Name:

CPAP system

Classification Name:

Ventilator, non-continuous (Respirator)

Predicate Devices:

EME - Infant Flow systems - K011516

Vapotherm - 2000I - K000401

#### Device Description

The Guardian Neonate CPAP / Humidification systems is non-invasive respiratory support device for neonatal patients

#### Intended Use and Environments

Intended Use --

Intended to provide CPAP for use in hospitals to

treat newborns and infants less than 5kg body weight with RDS or which are recovering from RDS (Respiratory Distress Syndrome). May or may not include humidification

capabilities.

Environment of Use --

Hospital

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### General Technical Characteristics

Attribute	Guardian CPAP System	
Intended to provide CPAP for neonates and infants < 5kg	Yes	
body weight with RDS or recovering from RDS		
(Respiratory Distress Syndrome)		
Humidification of gases	Yes	
Environment of Use - Hospital Yes		
Single patient use circuits and accessories including patient interfaces	Yes	
Design Features and Specifications		
PAP - Range of pressure 2 to 10 cm H <sub>2</sub> O		
Air / Oxygen mixture	Yes	
% O <sub>2</sub> range	21 – 100%	
Range of Flow delivered	l to 15 Lpm (Flow Mode)	
	1 to 20 L/min (CPAP Mode)	
Humidification method	Vapotherm microporous membrane	
Range of temperature of gas delivered	33 to 41 °C	
Measured Data		
Circuit Pressure (bar graph display) Range	0-12 cm H <sub>2</sub> O	
% O <sub>2</sub> (window display) - Range	21-100%	
Gas temperature - Range	10-50 °C	
Flow (bar graph)	Indicator	
Power	AC and Battery	
Pressure Relief Valve	18 cmH <sub>2</sub> O	
Alarms	High and Low Pressure	
	High and Low FIO <sub>2</sub>	
	High and Low Temperature	
Supply Gases Failure	Air and Oxygen	

## Differences between Other Legally Marketed Predicate Devices

The data within the submission demonstrates that the proposed device when compared to the predicate device is safe and effective and is substantially equivalent.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

# JUN 3 0 2004

Mr. John O'Dea General Manager Caradyne, Limited Parkmore Business Centre Parkmore West Galway, IRELAND

Re: K040862

Trade/Device Name: Guardian Neonate CPAP / Humidification System

Regulation Number: 21 CFR 868.5895 Regulation Name: Continuous Ventilator

Regulatory Class: II Product Code: CBK Dated: June 11, 2004 Received: June 14, 2004

Dear Mr. O'Dea:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4646. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and Radiological Health

ndications for Use			
510(k) Number:	K040862		
Device Name:	Guardian Neonate CPAP / Humidification system		
Indications for Use:			
Intended to provide CPAF body weight with RDS or Syndrome) May or may r	which are recovering	to treat newborns and infants less g from RDS. (Respiratory Distres ation capabilities	than 5kg s
Prescription Use <u>XX</u> (Per CFR 801.109)	or	Over-the-counter use	
Concurren	ce of CDRH, Office	of Device Evaluation (ODE)	<u> </u>
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(Division Sigh	-Off)		
Division of An	estnesiology, Ge	eneral Hospital, ces	
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